

Patent Claims:

1. Process for pulverizing and granulating melts, especially oxidic slag, glass or thermoplastic melts in which the melts are heated with burners in an antechamber and are ejected into a granulating chamber as a shroud surrounding a propellant stream, characterized in that hot combustion gases from the antechamber are mixed with the propellant stream.
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2. Process according to Claim 1, characterized in that the hot combustion gases of the antechamber are suctioned by way of an adjustable throttle cross section into a ring chamber surrounding the propellant stream nozzle and ejected with the propellant stream as the core of the tube-shaped melt stream into the granulating chamber.
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3. Process according to Claim 1 or 2, characterized in that the shroud of the melt stream is stressed at the output or after the output into the granulating chamber, on its outside, with hot gases for stabilizing an essentially cylindrical structure of the tube-shaped shroud.
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4. Device for pulverizing and granulating melts, especially oxidic slag, glass, or thermoplastic melts, which are ejected out of a heated antechamber (5) through an outlet opening over an outlet opening with a propellant stream into a granulating chamber (11), whereby a propellant stream nozzle (1) is mounted on the inside of antechamber (5) and surrounded by a height-adjustable pipe (2) that immerses into the melt (4), characterized in that pipe (2) has radial passages (10) at an axial distance from the end that is immersed in the melt (4) with formation of a ring slot to the outlet opening, which open out into the gas chamber of the antechamber (5) above the melt and that an adjustable slide (12) surrounding the pipe (2) in axial direction (3) or in circumference direction (17) is mounted for adjusting the inner passage cross section of the passages (10).
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5. Device according to Claim 4, characterized in that the outlet opening is designed as a concentric nozzle (8) and connected to a propellant medium connection.

5 6. Device according to Claims 4 or 5, characterized in that the antechamber (5) has at least one (6) burner mounted.

10 7. Device according to Claims 4, 5, or 6, characterized in that the granulating chamber (11), in the area adjacent to the outlet opening of the antechamber (5), has an inner cross section that expands conically in which further radially oriented nozzles (13) and/or burners are mounted.

15 8. Device according to one of Claims 4 to 7, characterized in that the granulating chamber (11), following the conically expanding cross section, is designed at least partially as a radiant cooling chamber.

9. Device according to one of Claims 4 to 8, characterized in that the granulating chamber (11) surrounds a cold eddy layer (15).